

AQUATIC FUNGI OF ALGERIA :
PYTHIUM MULTISPORUM POITRAS

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SUMMARY. — *Pythium multisporum* Poitras was isolated for the first time after its original discovery in the United States. This is the first report of its presence in Africa.

RÉSUMÉ. — *Pythium multisporum* Poitras a été isolé pour la première fois depuis sa découverte par POITRAS aux États-Unis. Cette communication est la première à signaler son existence en Afrique.

KEY WORDS : *Pythium multisporum*, Algeria.

INTRODUCTION

Pythium multisporum is a very rare aquatic fungus. Since its discovery in 1949 by POITRAS it has not been reported from anywhere else. During the course of investigation on aquatic fungi of Algeria, it was isolated twice, once from a small pond in Oran itself which dries up in summer months and once from Sebdou, a village near Tlemçen marking the gateway to the Algerian Sahara.

MATERIALS AND METHODS

Water samples were brought to the laboratory and baited with boiled hempseed halves. Colonised baits were washed repeatedly with sterile distilled water before subcultures were made every 15 days. The fungus was also grown on potato-carrot agar and incubated at 25°C to observe the daily growth rate.

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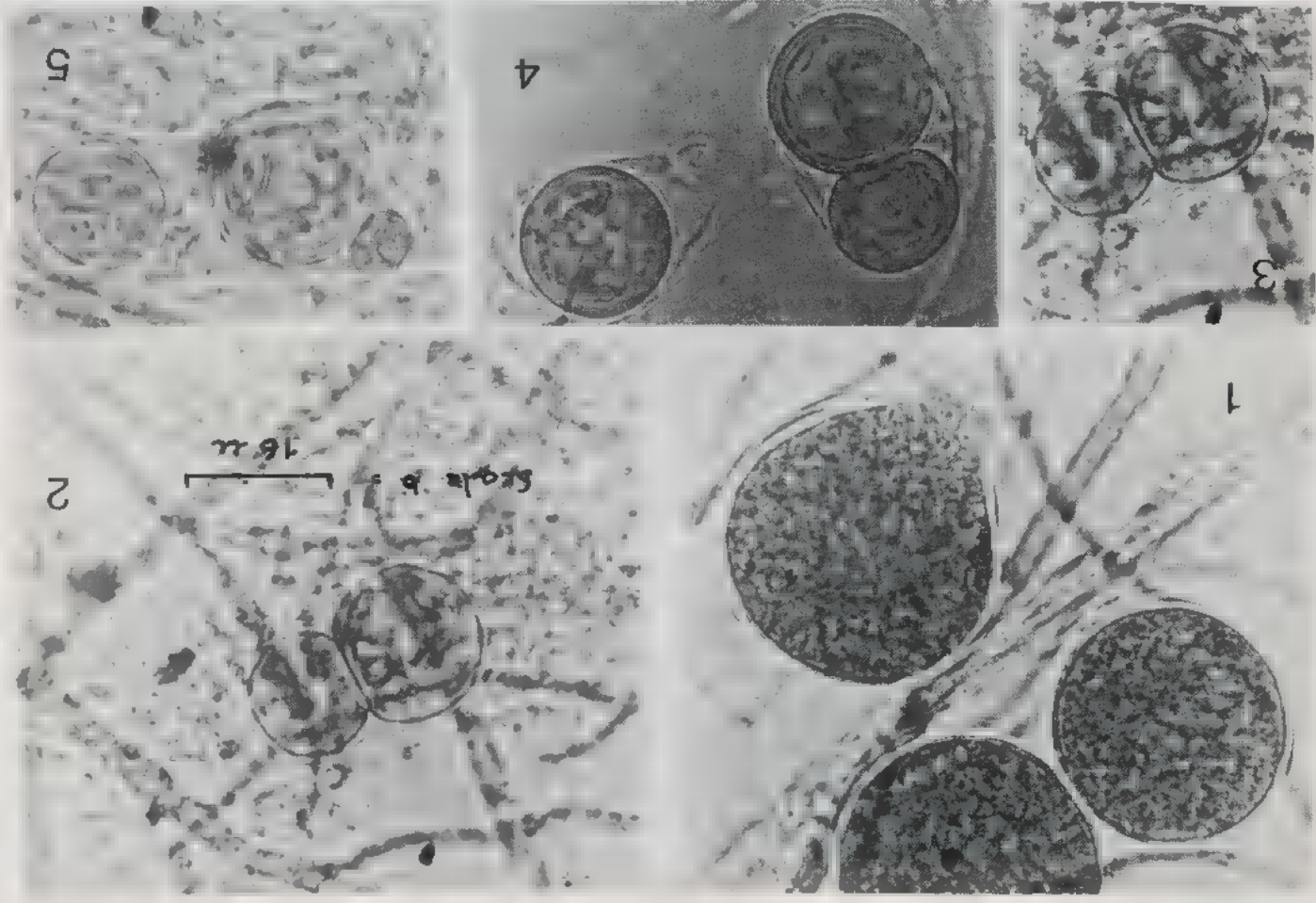


Plate 1. — 1 : Spherical and limoniform sporangia; 2-3 : Oogonia containing two oospores; 4-5 : Oogonia containing multiple oospores and single ones.
 Planche 1. — 1 : Sporangies sphériques limoniformes; 2-3 : Oogones contenant deux oospores; 4-5 : Oogones contenant une ou plusieurs oospores.

OBSERVATION AND DESCRIPTION (Pl. I & Fig. 1)

This fungus grows easily both in water and on potato-carrot agar. The daily growth rate on this medium is 13.5 mm where it gives a radiate pattern.

Main hyphae up to $6.5 \mu\text{m}$ wide, usually $3.5\text{-}4.5 \mu\text{m}$; Sporangia abundant, globose, spherical, pyriform or sometimes even irregular, terminal, rarely intercalary, proliferating, diameter ranging from $26\text{-}43 \mu\text{m}$ (spherical ones av. $32.7 \mu\text{m}$), others $25.6\text{-}48 \times 14.4\text{-}32 \mu\text{m}$ (average $32.5 \times 25.6 \mu\text{m}$), zoospores formed abundantly at room temperatures ($20\text{-}24^\circ\text{C}$). Oogonia smooth-walled, globose, subglobose, limoniform, oblong or even irregular, terminal or intercalary, each containing one or two rarely more oospores, those with a single

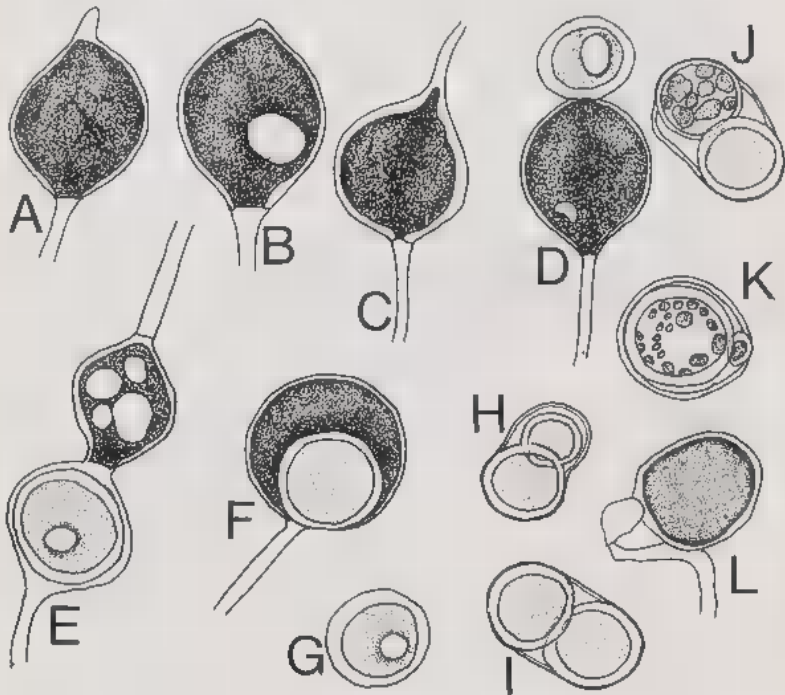


Figure 1. A-B . Limoniform sporangia; C : Germinating sporangium; D-F : Sporangia together with oospores, note the formation of an oospore within the sporangium in Fig. F, G : A simple oospore; H-K . Oogonia containing multiple oospores; L : An oogonium within an antheridium.

Fig. 1. — A-B : Sporangies limoniformes; C : Sporangie en germination; D-F : Sporangies groupés avec des oospores. Noter en F la formation d'une oospore à l'intérieur du sporangie; G : oospore; H-K : oogones contenant plusieurs oospores; L : oogone à l'intérieur d'une anthéridie.

oospore 9-28 μm in diameter (av. 20 μm), multisporeous oogonia 27-36 x 16-20 μm (av. 31.1 x 17.9 μm); antheridia 1-2 per oogonium, monoclinal, dichlinal and hypogynous; oospores almost plerotic, 7-26 μm in diameter (av. 16 μm), oospore wall 1.0-1.8 μm thick.

Apart from some minor differences, for example, smaller oogonia and oospores, these isolates from Algeria resemble in most details the original isolate of POITRAS from the United States. Its daily growth rate on potato-carrot agar deviates slightly from that observed by VAN DER PLAATS-NITERINK (1981).

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